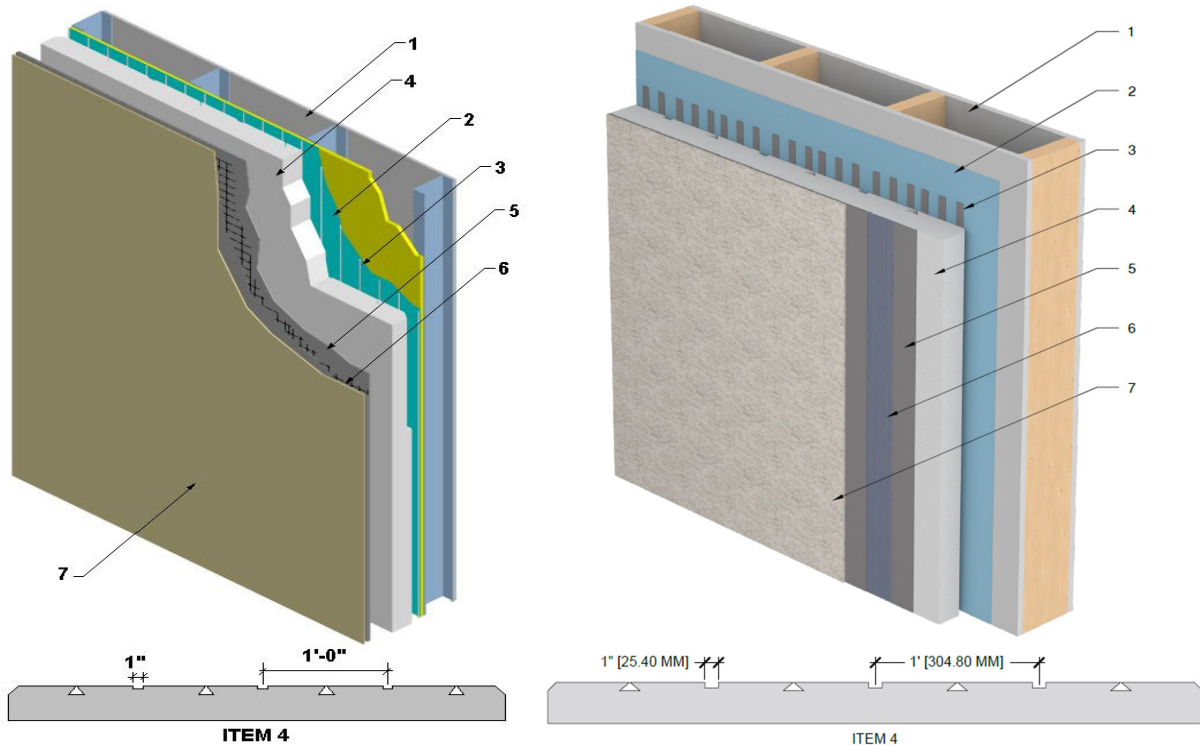


Tremco CPG Inc (Dryvit)
Design No. DSC/WDEIFS 25-02
EXTERIOR WALL SYSTEMS
Dryvit OUTSULATION® PD
CAN/ULC S134
Meets the Standard Requirements



1. WALL ASSEMBLY: The wall assembly is to be used in accordance with the requirements of the applicable Building Code or as approved by the Authority Having Jurisdiction. The structural capacity of the framing shall be verified and confirmed by engineer of record, ensuring that the framing design meets all applicable load-bearing requirements and complies with the relevant structural standards for the specific assembly. The wall assembly shall include:

A. Steel framing (or) 2 × 6 SPF wood studs nominally spaced 406 mm (16 in.) on center, with an exterior gypsum sheathing attached to the it.

B. The exterior sheathing must be gypsum-based, min. 12.7mm (1/2 in.) thick, conforming to ASTM C1177 or an equivalent standard.

2. WATER RESISTIVE BARRIER: Apply one of the following membrane systems to the exterior side of the wall assembly (Item 1):

A. Dryvit Dryflex™ – Polymer based cementitious air/moisture barrier applied in accordance with manufacturer's instructions.



- B. Dryvit Backstop NT VB – Polymer based non-cementitious air/moisture barrier applied in accordance with manufacturer's instructions.
 - C. Dryvit Backstop NTX Texture/Smooth – Polymer based, non-cementitious, air/water resistive barrier applied in accordance with manufacturer's instructions.
 - D. ExoAir 130 – Fluid-applied, synthetic, air and vapour retarder membrane.
 - E. ExoAir 230 – Fluid-applied, synthetic, air and vapour retarder membrane.
3. **ADHESIVE:** Mix Dryvit adhesive (Item 5) and apply using a 1/2 in. × 1/2 in. stainless steel notched trowel, in accordance with manufacturer's application instructions. Adhesive ribbons shall run vertically and measure approximately 9mm (3/8 in.) when formed and will be compressed when adhered to the substrate.
4. **INSULATION BOARD:** Secure insulation board with adhesive (Item 3) using one of the following options:
- A. 16 kg/m³ (1 pcf) expanded polystyrene (EPS) board, min. 51mm (2 in.) thick and max. 150mm (6 in.) thick, bonded with adhesive.
 - B. 16 kg/m³ (1 pcf) graphite-enhanced polystyrene (GPS) board, min. 51mm (2 in.) thick and max. 150mm (6 in.) thick, bonded with adhesive and four supplemental mechanical fasteners with appropriate type and length of corrosion-resistant fasteners and PBH Washers by Demand Products, Wind-lock Wind-Devil 2 plastic washers, or approved equivalent washer, per 610 x 1220mm (24 in. x 48 in.). Fasteners must be within 200mm (8 in.) of the sides of the boards and within 100mm (4 in.) of the top and bottom.

Exact location will depend upon the substrate (spacing of framing, or solid masonry).

- C. 28.8 kg/m³ (1.8 pcf) extruded polystyrene (XPS) board, min. 51mm (2 in.) thick and max. 83mm (3.3 in.) thick, bonded with adhesive. The board face receiving adhesive must be sanded.

Insulation boards may use field applied backwrapping or pre-wrapped starter boards as outlined in Item 7.

Insulation boards must be manufactured under a quality assurance program and conform to CAN/ULC S701 Type 1 for EPS and GPS, and Type 4 for XPS, with a flame spread rating less than 500 per CAN/ULC S102.2. Insulation board has a profile consisting of three 10mm (0.4 in.) deep × 25mm (1 in.) wide rectangular grooves running vertically on the interior side of the board spaced 305mm (12 in.) oc. Between rectangular grooves are four inverted triangular grooves spaced 305mm (12 in.) oc. The grooves measure 38mm (1-1/2 in.) at the base and narrow to 2mm (0.08 in.) at the peak. The base of the triangles aligns with the perimeter chamfer at a depth of 15mm (0.6 in.). Insulation boards have profile consisting of 6-10mm (.25-.40 in.) × 25mm (1 in.) grooves running vertically on the interior side of the board spaced 305mm (12 in.) oc. All outside edges are to be chamfered.

5. **BASE COAT:** Apply one of the following base coat applications to the exterior side of the insulation board (Item 4). In accordance with the manufacturer's application instructions, the exterior face of the insulation board must be sanded. After the initial coat, apply reinforcing mesh (Item 6) and then additional coats so that the mesh (Item 6) is completely embedded and the final thickness of the base coat is min. 2mm (1/12 in.).



- A. Dryvit Primus Adhesive/Base Coat – mixed at a 1:1 ratio by weight with Type GU Portland cement (a small amount of water may be added to achieve working viscosity) or,
- B. Primus DM Adhesive/Base Coat – mixed at a 4:1 ratio with clean potable water or,
- C. Genesis Adhesive/Base Coat – mixed at 1:1 ratio by weight with Type GU Portland cement (a small amount of water may be added to achieve working viscosity) or,
- D. Genesis DM Adhesive/Base Coat – mixed at a 4:1 ratio with clean potable water or,
- E. Rapidry 50/75 Adhesive Base Coat – mixed at a 4:1 ratio with clean potable water.

- 6. REINFORCING MESH:** Apply Dryvit mesh, either "Standard®", "Standard® Plus", Intermediate Mesh 150 – 372 g/m² (0.49 – 1.22 oz/ft²) self-extinguishing, edges overlapped 75mm (3 in.) min. and embedded into the base coat (Item 5) with a stainless-steel trowel.

The fiberglass mesh is back wrapped or edge wrapped with at least 63 mm (2-1/2 in.) of face coverage at terminations to fully encapsulate the insulation board. Factory assembled starter-boards with pre-applied wrap may be used along with self-adhesive standard mesh.

For additional impact resistance, a layer of Dryvit Panzer® Meshes 488 – 671 g/m² (1.6 – 2.2 oz/ft²) may be applied to the system prior to the application of standard meshes in accordance with the manufacturer's application instructions.

- 7. FINISH COAT:** Apply Dryvit "DPR" finish, StoneMist, TerraNeo, Ameristone, LymeStone, Custom Brick, and smooth coatings over the base coat (Item 5) in accordance with the manufacturer's application instructions for the specific finish, using stainless steel trowel.

When DPR finishes are used in systems built with wood studs described in Item 1, apply them over a Monocoat finish. Monocoat is a specialized product that combines the base coat and finish into a single integrated layer. Application should be in accordance with the manufacturer's application instructions.

- 8. JOINT TREATMENT (Not Shown):** Vertical and horizontal expansion joints, in nominal widths 19mm (3/4 in.) to 25.4mm (1 in.), are fitted with polyethylene backer rod, set approximately 6mm below the top surface of the lamina. The joint is then filled with polyurethane or silicone sealant.

- 9. OPTIONAL MECHANICAL FASTENING (Not Shown):** Where supplemental mechanical fastening is to be used for restraining the EPS to the substrate, GridmateClass PB(TM) or Wind-Devil 2 washers and fasteners can be used for penetrating through the EPS into the component substrate. Details of this installation can be found in the manufacturer's application instructions.

- 10. OPTIONAL INSTALLATION OVER ICF:** Installation of Dryvit Outsulation® PD over Nudura insulated concrete form (ICF) wall assemblies as an alternate base wall substrate (see Intertek Spec IDs 28233 and 29103) is permitted provided the ICF substrate complies with the following requirements:

- A. The ICF wall assembly shall consist of reinforced concrete construction with expanded polystyrene (EPS) insulation faces permanently integrated into the wall assembly.
- B. The exterior EPS face of the Nudura ICF substrate shall have a nominal thickness of 67 mm (2-5/8 in.) and a nominal density not greater than 21.6 kg/m³ (1.35 pcf).



- C. When installed over the Nudura ICF substrate described above, the maximum allowable Dryvit insulation board thickness shall be limited to 62 mm (2.45 in.) maximum thickness Type 1 EPS or Type 1 GPS insulation board conforming to CAN/ULC S701.
- D. The combined combustible foam plastic mass contributed by the Nudura ICF exterior EPS face and the Dryvit insulation board shall not exceed the combustible foam plastic mass represented by the qualified wall assemblies incorporating 152 mm (6 in.) thick Type 1 EPS insulation.
- E. All other components of the Dryvit Outsulation® PD system shall be installed in accordance with Items 2 through 9 of this listing and the manufacturer's published installation instructions.

This Design Listing is intended to provide guidance for on-site verification of the installation of system components and shall not be used in place of the manufacturer's published installation instructions. The manufacturer is responsible for providing installation instructions and requirements that ensure compliance with the system as tested and evaluated by Intertek. Installation must comply with this Design Listing, the manufacturer's installation instructions, and the applicable Code. In the event of conflict, this Design Listing governs.

Compliance of the assembly described in this Design Listing with the referenced standard(s) is contingent upon verification that the field-constructed assembly is consistent with the assembly described herein. Intertek-certified products may be verified by the authorized Intertek label. Products not bearing the Intertek label shall be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.

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Refer to the listing report in the Directory of Building Products (<https://bpdirectory.intertek.com>) for the applicable edition of the referenced standard(s).